ACTIVITY HAZARD ANALYSIS (AHA) REVIEW

COE EM 385-1-1 para 01.A.13.b: Work will not begin until the hazard analysis for the work activity has been accepted by the Government's designated authority and <u>discussed with all engaged in the activity, including the contractor, subcontractor(s), and Government on-site</u>

"Principle Steps" column identify "Sequences of Work" such as Mobilization, Fencing, Demolition, Asbestos Abatement, Electrical Distribution, etc. Contractor "Construction Schedule or Construction Progress Chart" is a good guide to identify "Sequences of Work" (See page 2).

Within each identified "Sequences of Work" there may be other successive steps to complete that phase of work such as Removal of lockers, LOTO of electrical systems, Protecting members of the public, A/C ducting installation work, Use of crane to lift 5,000 lbs. A/C unit, Excavations deeper than 6 ft for utilities, etc.

Activity:	DEMOLITION		
Project:	[redacted]	Date of Preparatory:	Analysis by/Date:
Location:	Pearl Harbor, Hawaii	3/1/00	
DO#	Task Order 005	Estimate Start Date:	Reviewed By/Date:
WR#	06973	3/1/00	
	Principal Steps	Potential Hazards	Recommended Controls
DEMOLITON		Personal Protective Equipments	Ensure personnel have the use of hard hats, safety shoes, gloves & short sleeves t-shirts.
			Ensure personnel use gloves to protects hands from sharp edges.
			Wear face/dust masks as necessary.
		Electric Shock	Survey the work area and check utilities that needs to turn off.
			Each employee handling small tools will be instructed as to safe handling and its use.
			All plugs- in power tools to use GFCI.
		Faulty Equipment	Ensure equipment is maintaiained in good working order & properly used.
			Ensure that equipment is stopped and secured from movement before servicing or repaired.
			Check equipment daily before use.
		General Safety	Ensure that proper barricade materials and signs have been placed. Use proper barricade like tape to mark off limits areas.
			Supervisor and Foreman are to actively stop Non- construction personnel from3 entering the jobsite area without proper excort.
			Ensure proper caution signs posted.
			Ensure flying dust is controlled by mapping with wet map.
		Back- strains	Each employee should be instructed in safe lifting procedures.
			Objects weighing over 80# requires 2 people.
		Falling ,tripping and cuts	Ensure personnel pratice proper housekeeking to prevent tripping & cutting.

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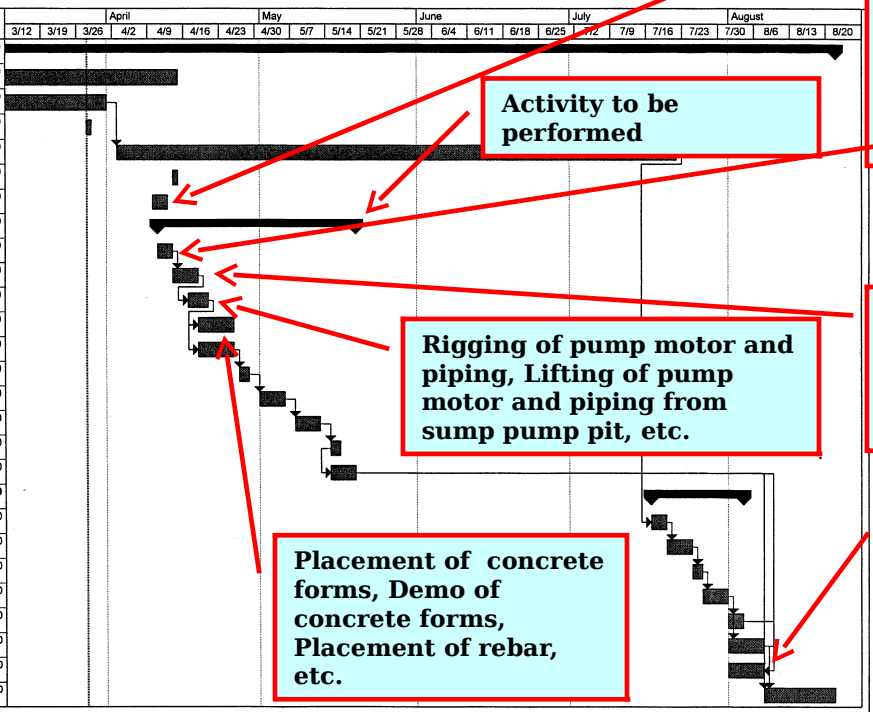
The below are examples of major "Sequences of Work" or "Phases of Work" that could be identified on the AHAs as "Principle Steps" or successive steps to complete a sequence or p

3/28/00

J.A. J[redacted]

DO 0024 - REPAIR DRAIN PUMP SYSTEM AND SEWAGE SYSTEM
BLDG. 129, DRYDOCK NO. 3 PUMPWELL
PEARL HARBOR NAVAL SHIPYARD, OAHU, HAWAII

ID	Task Name	Start	Finish
1	**DO 0024**	**11/1/99**	**8/21/00**
2	Drawings	2/21/00	4/14/00
3	Approve Submittals	11/1/99	3/31/00
4	Precon	3/28/00	3/28/00
5	Pump delivery	4/3/00	7/21/00
6	Pipe/fitting delivery	4/14/00	4/14/00
7	Mobilize	4/10/00	4/12/00
8	**DRAIN PUMP SYSTEM**	**4/11/00**	**5/19/00**
9	Rem. grating/steel and set up riggin	4/11/00	4/13/00
10	Rem pump motor and shaft	4/14/00	4/18/00
11	Rem pump and piping	4/17/00	4/20/00
12	Demo/modify foundation	4/19/00	4/25/00
13	Modify valve operators	4/19/00	4/25/00
14	Install drain pump	4/27/00	4/28/00
15	Modify shaft	5/1/00	5/5/00
16	Install fittings and valves	5/8/00	5/12/00
17	Install shaft & motors	5/15/00	5/16/00
18	Testing & alignment	5/15/00	5/19/00
19	**SEWAGE PUMP SYSTEM**	**7/17/00**	**8/3/00**
20	Rem pump and piping	7/17/00	7/19/00
21	Demo/modify foundation	7/20/00	7/24/00
22	Install sewage pump	7/25/00	7/26/00
23	Install fittings & valves	7/27/00	7/31/00
24	Testing	8/1/00	8/3/00
25	Painting	8/1/00	8/7/00
26	Demobilize	8/1/00	8/7/00
27	Prefinal/final	8/8/00	8/21/00



Project: do0024
Date: 3/28/00

Task — Milestone — Rolled Up Split — External Tasks
Split — Summary — Rolled Up Milestone — Project Summary
Progress — Rolled Up Task — Rolled Up Progress

Page 1

Examples of Principle Steps from start to finish.

Within each Principle Step there may be other Successive Steps to complete the above Principle Steps.

The blocks on the right are examples of other Successive Steps.

Activity to be performed

Installation of perimeter fencing, Placement of field office trailer, Installation of fall protection anchors, Unloading heavy eq[illegible] ar[illegible]

Installation of rigging components, Lifting of steel grating, Torch cutting on steel

LOTO pump motor, Removal of lead paint on bolts and piping, Unbolting pump motor from housing, etc.

Rigging of pump motor and piping, Lifting of pump motor and piping from sump pump pit, etc.

Placement of concrete forms, Demo of concrete forms, Placement of rebar, etc.

Removal of project fencing, Removal of field office, Loading of heavy equipment, Clean up of staging area of debris, etc.

COE EM385-1-1 para 01.A.13.a: Analysis will define the activities being performed and identify the sequences of work, the specific hazards anticipated site conditions, equipment, materials, and the site specific control measures to be implemented to eliminate or reduce each hazard to an acceptable level.

ACTIVITY HAZARD ANALYSIS (AHA) REVIEW

List of questions that will help you identify most hazards:

(a) Is there danger of striking against, being struck by, or otherwise making injurious contract with an object?

(b) Can the employee slip or trip?

(c) Can the employee be caught in, on or between objects?

(d) Can the employee fall on the same level or to another?

(e) Can the employee strain themselves by pushing, pulling or lifting?

(f) Is there possibility of electrical, health or fire hazards?

(g) Is there a possibility of employee coming in contact with a hazardous chemical or substance?

"Potential Hazard" column lists potential or anticipated hazards for each "Sequences of Work"or "Phases of Work" identified from the "Principle Step" column.

ACTIVITY HAZARD ANALYSIS

[redacted]

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		Ensure personnel use gloves to protects hands from sharp edges.
		Wear face/dust masks as necessary.
	Electric Shock	Survey the work area and check utilities that needs to turn off.
		Each employee handling small tools will be instructed as to safe handling and its use.
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	Faulty Equipment	Ensure equipment is maintaiained in good working order & properly used.
		Ensure that equipment is stopped and secured from movement before servicing or repaired.
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	Back- strains	Each employee should be instructed in safe lifting procedures.
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ACTIVITY HAZARD ANALYSIS (AHA) REVIEW

"Potential Hazard" column can have "General Safety" as a potential hazard to include minimal PPE dress for ROICC projects. "General Safety" should be identified for every phase of work.

Good examples of "Potential Hazards"

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[redacted]

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ACTIVITY HAZARD ANALYSIS (AHA) REVIEW

"Recommended Controls" column identify site specific control measures to be implemented to eliminate or reduce each hazard identified in the "Potential Hazard" column to an acceptable level.

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To help you come up with ideas for th solution ask the following:

(a) How can the conditions be change eliminate the hazard?

(b) What can the employee do to prev accident or eliminate the hazard?

ACTIVITY HAZARD ANALYSIS (AHA) REVIEW

<u>Your recommended controls measures are to be site specific and should provide sufficient information to personnel on how to eliminate or reduce anticipated hazards for each phase of work.</u> **General statements such as Provide adequate fall protection, Proper shoring techniques will be followed, LOTO procedures will be implemented, etc. are not site specific recommend controls measures and will not be accepted.** **Site specific plans such as Fall Protection, Confined Space, LOTO, Critical Lift, etc. can be attached to the AHAs as a supplement to the AHAs.**

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General statements that are not acceptabl

ACTIVITY HAZARD ANALYSIS (AHA) REVIEW

Equipment To Be Used	Inspection Requirements	Training Requirements
	Falling Loads	Ensure personnel use caution when cutting to prevent injury. Ensure stockpiled materials do not slide or fall on personnel. Ensure personnel remain clear when removal works. Use back ups if necessary

List equipment to be used for the phase of work such as crane, backhoe, powder actuated tools, electric saws/drill, etc.

List inspection requirements for the phase of work such as confined space by an competent person, daily housekeeping, hand and power tools daily inspections, machinery and equipment inspected daily, etc.

List training requirements for the phase of w such as fall protection, confined space, HAZ qualified equipment operators, safe use of la HAZWOPER, etc.